

REMARKS

Examiner Stephens is thanked for the careful examination of the application, and for entry of the Preliminary Amendments filed on March 10, 2004 and April 28, 2005.

The Official Action states that claims 1 – 20 have been rejected under 35 USC 102 or 103 as being unpatentable over US SIR H1674, hereinafter *Ames*. However, based on other comments in the Official Action, applicants assume that the rejection is only of claims 1 – 6 and 12 – 20 because claims 7-8 were rejected on other grounds, i.e., *Ames* in view of US 2003/0100878 A1 (*Leak*), and claims 9-11 were found to contain allowable subject matter.

The Examiner alleges that *Ames* discloses several portions of the claims, including the topsheet, the backsheet, the absorbent core, and a pair of opposed belt halves. With regard to the pair of opposed belt halves, the Examiner acknowledges that *Ames* does not disclose the claimed minimum average release times at each of the recited angles. The Examiner alleges that such features are merely an “intended use” and that an intended use must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. In response to this comment, applicants submit that the release times do in fact define material and structural features of the claimed invention because not every structure will achieve such release times, only certain types of structure will achieve such release times. Furthermore, the Examiner appears to accept this position because the Examiner has examined such features.

However, the Examiner alleges that *Ames* teaches “similar materials and structure for the belt halves (col. 16, line 41 through col. 18, line 21).” The Examiner thus concludes that *Ames* “obviously includes belt halves capable of providing the claimed release times”. As support for the conclusion, the Examiner further states that “it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the belt halves of *Ames* with the claimed release times of the present invention, since where the general conditions of a claim are disclosed in the prior art, it is not inventive to discover the optimum or workable ranges by routine experimentation.”

Based on such comments, it is clear that the Examiner recognizes that there are in fact some structural differences between the *Ames* belt halves and the claimed invention. Thus, it appears to be the position of the Examiner, that it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify *Ames* to achieve the claimed release times.

Contrary to the allegations of the Examiner, the present invention would not have been obvious to one having ordinary skill in the art. Specifically, the present invention is not simply a question of how strong or securely the belt halves are attached to the absorbent article. If that were the case, the joint between the belt halves and the absorbent article could simply be increased to a minimum level.

According to the present invention, the joint between each belt half of the article and the absorbent structure should ensure that the article remains in the intended position on the wearer. This function places certain minimum requirements on the strength of the joint. As is explained in paragraph [0007] of the specification, the article must be capable of fulfilling these functions even when worn by wearers of greatly differing size and shape.

The present inventors have recognized that there is a tendency for existing belted absorbent articles to fail prematurely due to the joint between the belt halves and the absorbent structure, releasing either as the article is being put on or during use. One solution to such a problem would be to make the joint between the belt halves and the absorbent structure stronger by, for example, using more adhesive or increasing the size of the bonding area. However, to keep production costs as low as possible and to keep the comfort of the product as high as possible, it is desirable to use as little bonding material as possible. To excessively increase the bonding area and/or the amount of adhesive in each product would lead to an unacceptable increase in the cost of such an article or decrease in the comfort of the article. Since adhesive generally restricts the breathability of an absorbent article, as well as tending to increase the stiffness of the regions of the article to which it is applied, it is desirable from a wearer comfort point of view to minimize the quantity of adhesive in an absorbent article.

The present inventors were therefore faced with providing a joint between belt halves in the absorbent structure of a belted absorbent article which they could be sure would be strong enough to be adequately reliable during use, but which would not incur undue expense during manufacture, nor unduly comprise wearer comfort. As explained in paragraph [0008] of the application, the inventors recognized that the

failure of the joint between the belt halves and the absorbent structure was more prevalent at greater values of the angle α , i.e., the angle between the longitudinal axis of the belt half and the transverse axis of the absorbent structure. They discovered that, in order for a belted absorbent article to function satisfactorily, while still keeping manufacturing costs as low as reasonably possible, the joint between each belt half and the absorbent structure should preferably meet certain minimum requirements depending upon the angle α . The inventors discovered that if an article displays the minimum characteristics set forth in the claims, it will be adequately reliable in use. In other words, according to the present invention, a manufacturer can immediately ascertain whether his product will fulfill market expectations regarding reliability, and at the same time avoid "over engineering" the products. It is the inventors' realization that the strength of the joint can be dependent upon the value of the angle α , and that as a result, over engineering of the products can be avoided. It is the recognition of this relationship and its application to the present invention that is not taught or suggested by the prior art.

This situation is analogous to the numerous cases which hold that recognition of a problem must be considered in determining the obviousness of the solution. See, e.g., *In re Zurko*, 42 U.S.P.Q. 1476 (Fed. Cir. 1997) and *In re Hamilton*, 17 U.S.P.Q. 245 (C.C.P.A. 1933). Accordingly, the Examiner has failed to consider the fact that the applicants discovered the relationship between the angle α and the strength of the joint. *In view of the fact that no one in the prior art recognized this relationship, it cannot be said that the solution set forth in the claims is obvious.*

As a result of the inventors work, the claims define an article that is strong enough to function properly, and that can avoid being over-engineered. In view of

the foregoing remarks, the Examiner is respectfully requested to reconsider and withdraw the outstanding rejection of claims 1 – 6 and 12 - 20.

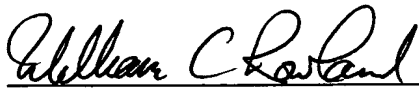
Claims 7 and 8 have been rejected over *Ames* in view of *Leak*. However, the Examiner relies upon *Leak* only for its alleged teaching of the spaced apart parallel adhesive lines, citing Figure 3. However, the lines 28 of Figure 3 are not adhesive lines, they are ultrasonic bond lines. Furthermore, they do not otherwise overcome the deficiencies set forth above with regard to *Ames*. Accordingly, the rejection of claims 7 and 8 should also be withdrawn.

In the event that there are any questions concerning this response, the Examiner is respectfully urged to telephone the undersigned attorney so that prosecution of the application may be expedited.

Respectfully submitted,

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